

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P966131

Luminaire Tested: **NAV-SB4B-735-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966131
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-735-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24224.8 lumens
Efficiency: N/A
Efficacy: 164.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

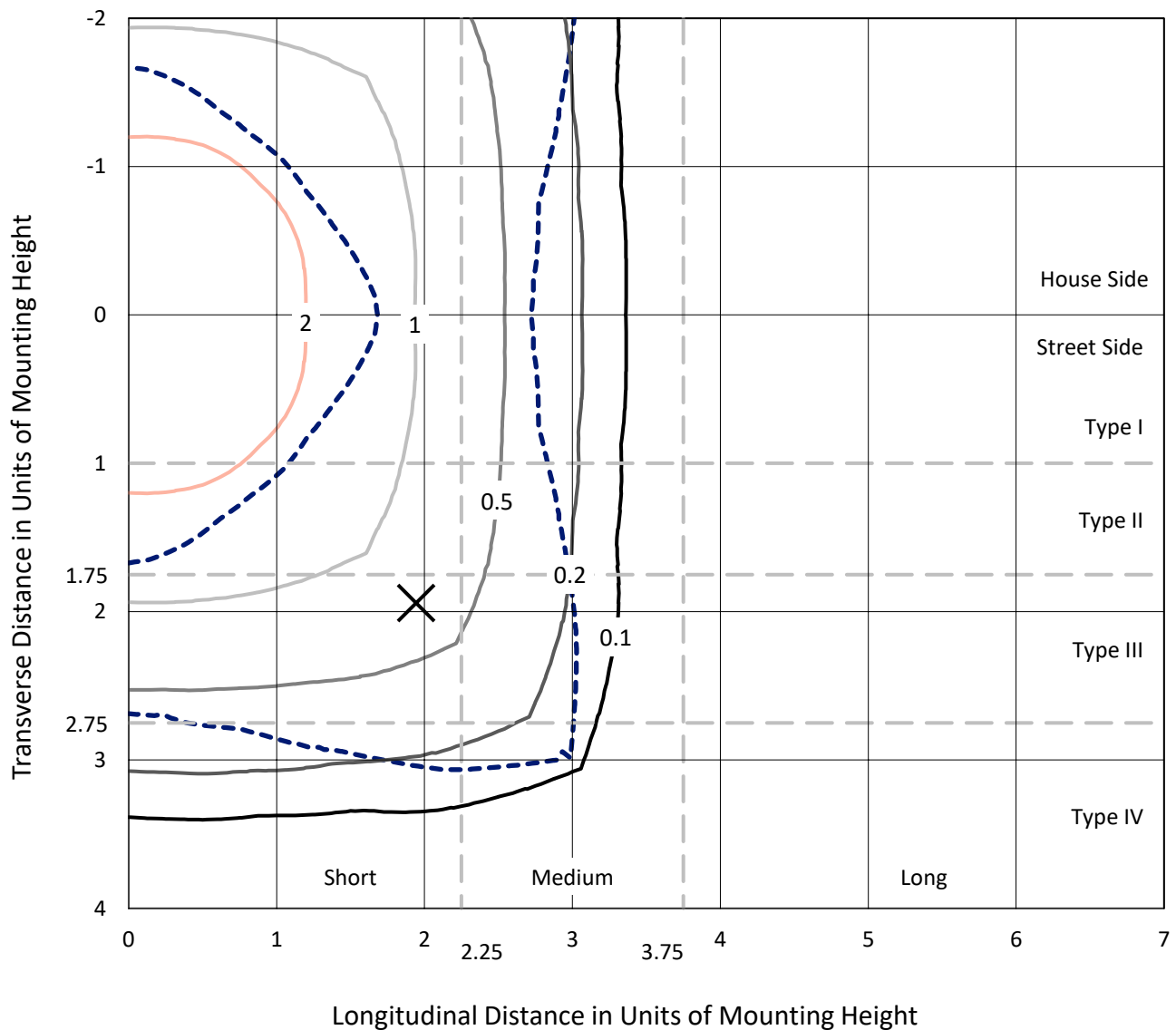
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

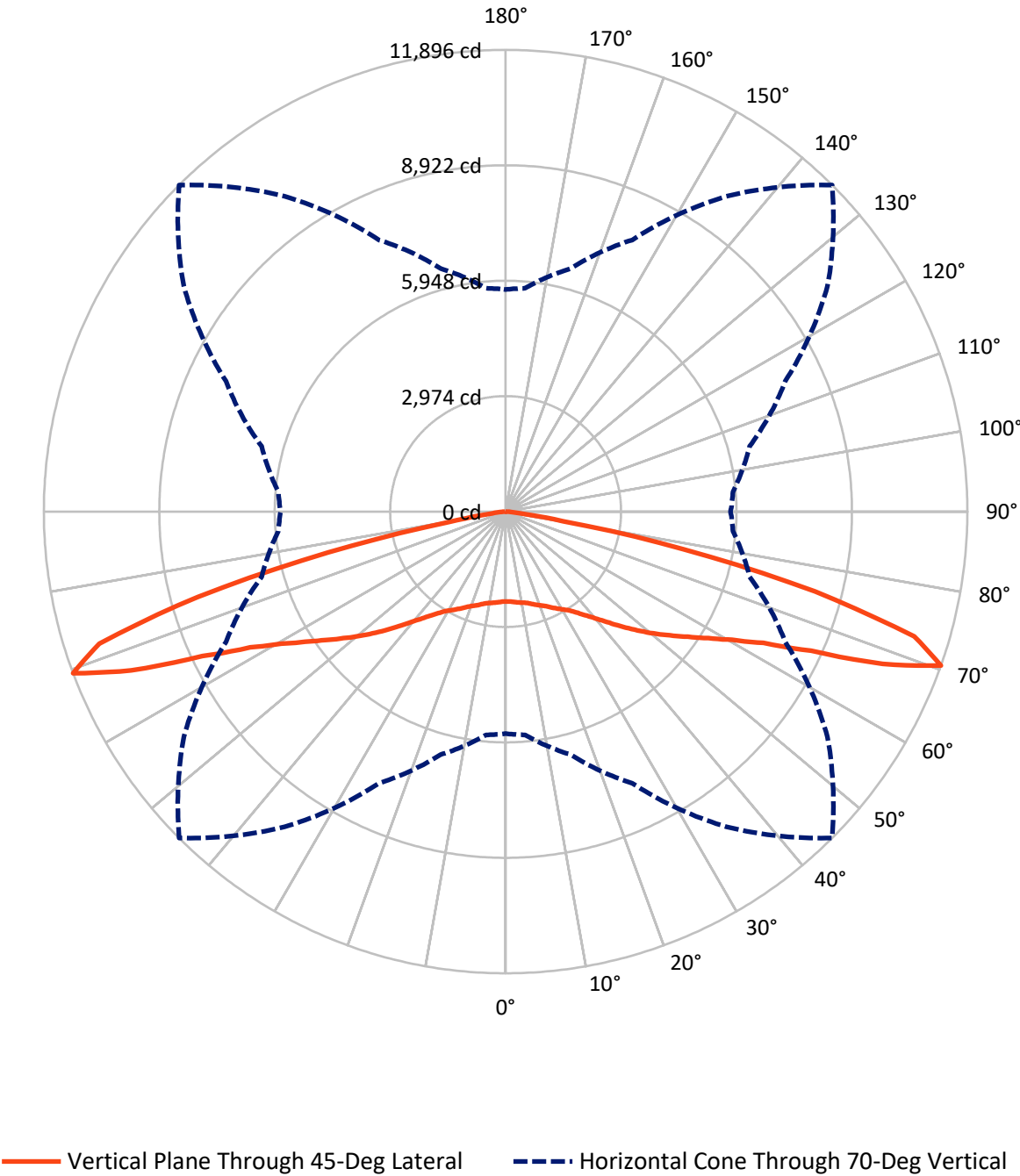
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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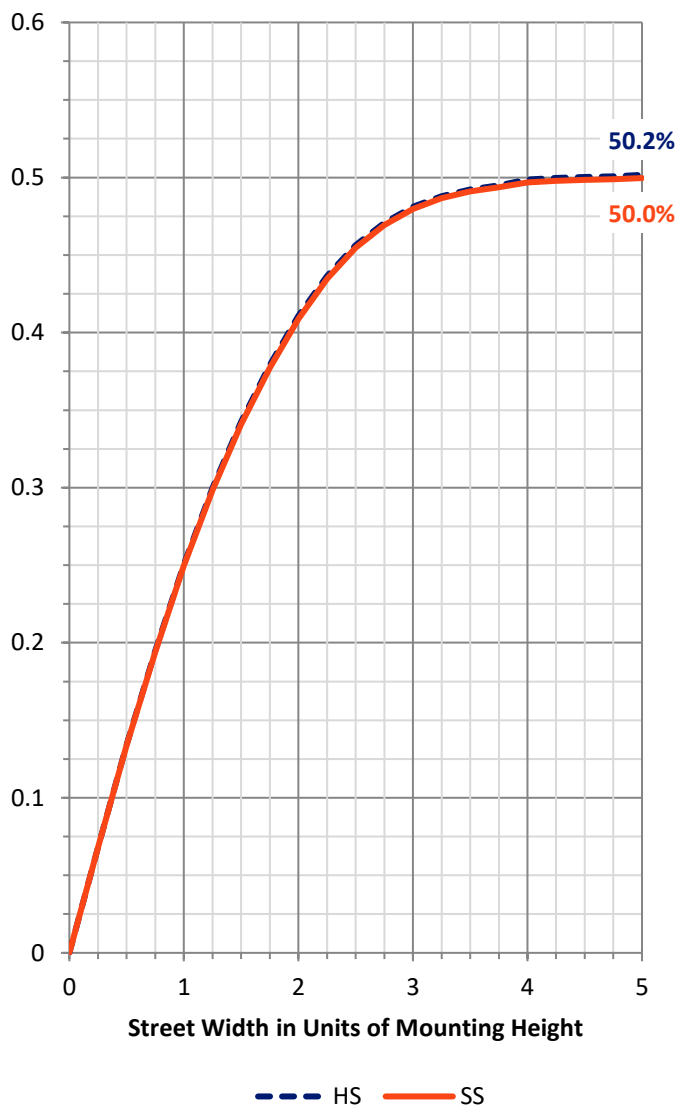
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12112.4	0.0	12112.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12112.4	0.0	12112.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	24224.8	0.0	24224.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.4	0.9
10°-20°	699.1	2.9
20°-30°	1249.3	5.2
30°-40°	2025.1	8.4
40°-50°	3298.5	13.6
50°-60°	5029.1	20.8
60°-70°	7481.7	30.9
70°-80°	4077.8	16.8
80°-90°	138.9	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24224.8	100.0
0°-180°	24224.8	100.0

Coefficient of Utilization



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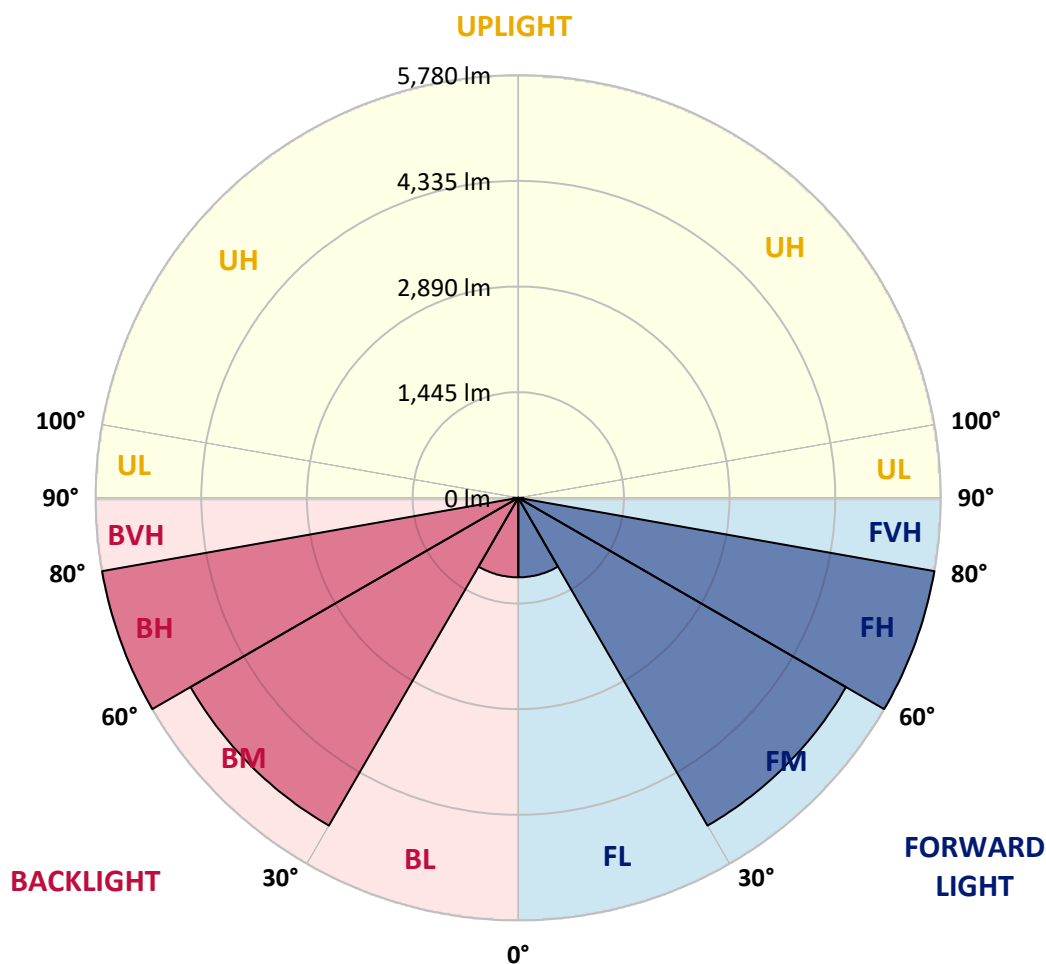
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1086.9	4.5			
FM	(30°-60°)	5176.4	21.4			
FH	(60°-80°)	5779.7	23.9			G3/7500
FVH	(80°-90°)	69.4	0.3			G1/100
BL	(0°-30°)	1086.9	4.5	B3/2500		
BM	(30°-60°)	5176.4	21.4	B4/8500		
BH	(60°-80°)	5779.7	23.9	B5		G3/7500
BVH	(80°-90°)	69.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5	2320.5
2.5°	2331.5	2333.8	2329.0	2326.5	2324.2	2320.5	2321.7	2327.8	2332.7	2331.5	2332.7
5°	2350.9	2353.3	2349.7	2348.5	2343.6	2342.4	2342.4	2348.5	2352.1	2349.7	2350.9
7.5°	2372.8	2376.5	2370.3	2369.2	2366.7	2364.3	2363.0	2369.2	2372.8	2372.8	2372.8
10°	2393.5	2397.1	2392.2	2388.6	2386.2	2386.2	2383.7	2388.6	2394.7	2393.5	2393.5
12.5°	2415.3	2417.8	2413.0	2410.5	2410.5	2414.2	2410.5	2413.0	2417.8	2415.3	2414.2
15°	2442.1	2443.3	2442.1	2445.8	2451.8	2464.0	2453.0	2450.7	2453.0	2447.0	2447.0
17.5°	2478.6	2481.0	2485.9	2494.4	2502.9	2524.8	2505.3	2499.3	2499.3	2487.1	2487.1
20°	2523.5	2527.2	2534.5	2549.2	2560.0	2580.7	2561.3	2552.8	2549.2	2533.3	2533.3
22.5°	2571.0	2577.1	2588.0	2607.5	2627.0	2646.4	2627.0	2612.4	2601.4	2580.7	2579.5
25°	2625.7	2633.0	2650.0	2681.7	2708.5	2736.4	2713.3	2684.2	2662.2	2633.0	2631.8
27.5°	2703.5	2712.1	2732.8	2771.7	2805.7	2830.0	2808.2	2770.5	2740.0	2704.8	2703.5
30°	2813.0	2821.5	2845.9	2887.2	2910.4	2926.2	2911.5	2882.4	2845.9	2805.7	2805.7
32.5°	2954.2	2965.1	2991.9	3030.7	3035.6	3038.0	3033.2	3018.6	2991.9	2943.2	2944.4
35°	3132.9	3145.1	3175.4	3207.1	3202.2	3207.1	3199.8	3194.9	3175.4	3119.5	3119.5
37.5°	3351.9	3366.4	3398.1	3422.4	3410.2	3404.1	3405.4	3406.6	3395.6	3333.6	3333.6
40°	3606.1	3625.4	3648.6	3674.1	3653.4	3635.2	3647.4	3657.1	3647.4	3584.1	3584.1
42.5°	3867.5	3895.4	3919.8	3956.3	3939.3	3916.1	3933.1	3944.1	3923.4	3855.3	3860.2
45°	4158.1	4184.9	4216.5	4271.3	4259.1	4234.8	4259.1	4261.5	4226.3	4146.0	4154.5
47.5°	4458.5	4486.5	4534.0	4607.0	4602.0	4575.3	4607.0	4590.0	4544.8	4448.8	4442.8
50°	4743.2	4782.0	4855.0	4957.2	4966.9	4934.0	4976.7	4943.8	4868.4	4748.0	4745.5
52.5°	5010.7	5052.0	5167.6	5306.2	5341.5	5298.9	5356.1	5298.9	5185.8	5031.4	5016.8
55°	5291.7	5337.9	5475.2	5656.5	5727.1	5695.4	5748.9	5662.6	5502.0	5314.7	5289.2
57.5°	5622.4	5650.4	5814.6	6029.9	6149.1	6156.4	6180.6	6034.7	5840.1	5627.4	5598.1
60°	5981.2	6020.1	6198.9	6456.8	6645.3	6706.1	6680.5	6464.1	6237.8	5993.4	5954.4
62.5°	6440.9	6483.5	6697.6	7006.5	7304.5	7455.2	7355.5	7041.7	6762.0	6468.9	6417.8
65°	6821.6	6869.0	7255.8	7806.7	8349.1	8651.9	8401.4	7823.7	7320.2	6906.8	6838.6
67.5°	6545.5	6603.9	7210.8	8222.7	9571.4	10475.1	9617.7	8346.7	7360.4	6799.7	6715.8
70°	5720.9	5775.7	6483.5	7720.4	9915.6	11895.5	10122.4	7947.8	6506.6	5879.1	5795.1
72.5°	3798.1	3974.5	4690.8	6174.6	8853.8	11007.8	8941.4	6049.3	4351.5	3789.6	3666.8
75°	1259.9	1401.1	1890.0	3201.0	5930.1	8232.4	5645.6	2832.5	1497.1	1077.6	1019.2
77.5°	317.4	366.0	504.7	915.8	2365.5	4687.2	2129.5	747.9	407.4	284.5	254.2
80°	154.5	170.3	243.2	305.2	592.2	1489.8	555.8	287.0	192.2	148.4	136.2
82.5°	85.2	86.3	137.5	172.7	220.2	385.5	228.7	167.8	110.7	90.0	90.0
85°	52.3	51.0	73.0	92.5	92.5	137.5	109.5	92.5	63.2	56.0	58.4
87.5°	20.7	20.7	26.8	29.2	25.5	35.3	28.0	30.4	24.3	23.1	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)